Hyperwall Presentation
2011 Fall AGU, Moscone West, NASA Booth 1637

Date & Time	Presenter	Topic	Description
Tuesday, Dec. 6			
10:00 - 10:30	Dr. Eric Brown Decolstoun Physical Scientist EPO for Earth Science @GSFC email: eric.c.browndecolsto@nasa.gov tel. 301.614.6597	Tracking the Fingerprints of Change	NASA's space-based perspective allows scientists to measure, monitor and investigate changes and interactions within the Earth system from the local to the global scale, and at a variety of temporal scales. We recognize that humans are a principal driver of many of the changes we see from space, and we aim to better understand the potential consequences on this change on us but also the planet. In this Hyperwall presentation Dr. Brown de Colstoun will use the lens of remote sensing to explore the various expressions of this human 'fingerprint' on the planet, from urbanization to deforestation to agriculture, among others. Dr. Brown de Colstoun will also discuss his current research into mapping global urbanization from space using the global land survey data sets from Landsat.
10:30 - 11:00	Dr. Phil Webster NASA Center for Climate Similation email: phil.webster@nasa.gov tel. 301.286.9535	NASA Center for Climate Simulation: Data Supporting Science	The NASA Center for Climate Simulation (NCCS) offers integrated supercomputing, visualization, and data interaction technologies to enhance agency capabilities in weather and climate prediction. Its centerpiece is the Discover supercomputer, which now offers more than 32,000 processors and nearly 400 teraflops peak performance. NCCS also supports users with a massive data archive, a new data management system, expanded data analysis and visualization capabilities featuring a 17- by 6-foot hyperwall, and services for distributing simulation data. Science highlights include (1) global simulations with resolutions as fine as 3.5 kilometers producing cloud and hurricane features at groundbreaking fidelity, (2) a comprehensive 30-year reanalysis assimilating over 50 billion observations, and (3) climate change projections for the Intergovernmental Panel on Climate Change.
3:30 - 4:30	Dr. Eric Lindstrom Physical Oceanography Program Mgr. NASA HQ email: eric.j.lindstrom@nasa.gov tel. 202.358.4540	The Dynamic Hydrosphere: A quick tour of the dynamic ocean and cryosphere of Earth	Ocean eddies, global sea level variability, the living ocean, chaning sea ice, and dynamic ice sheets. Satellite altimeters detected a significant drop in global mean sea level, beginning in the spring of 2010 and falling by about half a centimeter by spring or summer of 2011. The drop corresponded to the fast transition from the 2009/2010 El Niño to the 2010/2011 La Niña. In this presentation, GRACE data show that most of the drop was due to a decrease of the amount of water in the ocean. In 2011, large amounts of extra rain were detected using TRMM data over the regions that gained mass (the northern parts of Australia and S. America). This means that the 2011 La Niña was responsible for transferring enough water from the ocean onto the land to cause global mean sea level to fall.
Wednesday, Dec. 7			
10:00 - 10:30	Dr. Steve Platnick EOS Sr. Project Scientist; A-Train Project Scientist email: steven.e.platnick@nasa.gov tel. 301.614.5635	Viewing the Earth's Climate from Space	An overview of the NASA space-based view of the Earth's climate system – including atmosphere, ocean, biosphere, cryosphere, surface, and international colloborations.
10:30 - 11:00	Dr. Laura Iraci NASA Ames Research Center email: laura.t.iraci@nasa.gov tel. 650.604.0129	NASA Science in the Middle of Nowhere: Measuring Greenhouse Gases in Railroad Valley, NV	In June 2011, scientists from NASA's Ames Research Center joined a multi-institute team of researchers to investigate carbon dioxide and methane gas emissions from a dry lake bed and the neighboring environment in Railroad Valley, Nevada. Measurements were taken from the ground and onboard two aircraft, and the data will be compared to those measured by the GOSAT satellite. During the campaign, the Ames team conducted a series of flights with an unmanned aircraft system (UAS) known as SIERRA and with a modified Alpha Jet. Methane emissions were also measured from hot and cold springs in the area, and soil microbiology was explored to determine the origin of the methane. This talk will describe the instrumentation and airborne platforms used, as well as preliminary results
3:30 - 4:00	Dr. Paul Newman Chief Scientist for Atmospheri Science at NASA Goodard Space Flight Center, Earth Science Division	Overview of current state of Antarctic Ozone Hole	
4:00 - 4:30	Dr. Compton Tucker email: compton.j.tucker@nasa.gov tel. 301.614.6644 Dr. Matt Hansen, UMD	Tropical deforestation - A new look	Using satellite data monitoring deforestation for mitigation and manage the local resource.
Thursday, Dec. 8			
10:00 - 10:30	Dr. Shawn Domagal-Goldman Astrobiology Management Postdoc Fellow, NASA Headquarters tel. 321.396.2465 Research site: http://www.astro.washington.edu/users/sgoldman/	Search for Life Beyond Solar System	Search ways to look for life on other planests, life on planets around other stars

10:30 - 11:00	Dr. Compton Tucker email: compton.j.tucker@nasa.gov tel. 301.614.6644 Dr. Matt Hansen, UMD	Tropical deforestation - A new look	Using satellite data monitoring deforestation for mitigation and manage the local resource.
3:30 - 4:00	Dr. Ralph Kahn email: ralph.a.kahn@nasa.gov tel. 301.614.6193 Senior Research Scientis, Earth Science Division at NASA's Goddard Space Flight Center.	Wildfire Smoke, Desert Dust, Volcanic Ash -- Mapping Airborne Particle from Space	Airborne particles, both natural and anthropogenic, affect climate and human health. With space-based, multi-angle and multi-spectral imaging, we map aerosol amounts, types, and plume heights over vast regions, making it possible to study the role they play in the ecology of the planet.
4:00 - 4:30	Dr. Gail Skofronick Jackson GPM Deputy Project Scientist email: gail.s.jackson@nasa.gov tel. 301.614.5720 Dr. Dalia Kirschbaum GPM Outreach Scientist email: dalia.b.kirschbaum@nasa.gov tel. 301.614.5810	Precipitation observations from space: from TRMM to GPM	The Precipitation Measurement Missions (PMM) program, including TRMM and GPM, seeks to improve our scientific understanding of the Earth system and its response to natural and human-induced changes using precipitation measurements from space. This will enable improved prediction of climate, weather, and natural hazards (e.g. hurricanes, floods, and landslides) for scientific research and societal benefit. In this presentation learn about the successes of TRMM, launched in 1997, and the enhanced capabilities of GPM to be launched in 2014.